

REMARKS

Claims 1-11 and 14-39 are pending in the application. Claims 1-11 and 14-39 stand rejected. Claims 1-11, 14-24, and 28-39 are objected for a variety of informalities. Applicant amends claims 1, 3, 6, 9, 14, 19, 21, 22, 25, 27, 28, 30, 31, 35, and 36, cancels claim 7, and adds claims 40-52. Claims 2-6, 8-11, and 14-52 remain in the case. The Applicant adds no new matter and requests reconsideration.

Allowable Subject Matter

Claims 36 and 37 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and overcome the rejections(s) under 35 U.S.C. § 112, 2nd. The Applicant has elected to rewrite claim 36 into independent form to place the claims in condition for allowance.

Claim Objections

Claims 1-11, 14-24, and 28-39 are objected for a variety of informalities. The Applicant amends claims 1, 3, 6, 14, 19, 21, 22, 28, 30, 31, 35, and 36, to obviate the Examiner's objections.

Claim Rejections – 35 U.S.C. § 112 ¶ 2

Claims 7-11, 14-18, and 28-37 are rejected under 35 U.S.C. § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicant amends claim 9, 14, 28, and 36 and cancels claims 7 to obviate the Examiner's rejection as to claims 7, 9, 14-18, and 28-37.

The Applicant respectfully traverses the Examiner's rejection as to claims 8, 10, and 11, as the specification clearly shows an interface 68 including multiple circuit cards 50, 70, 72 and 74, each comprising multiple digital signal processors. See, e.g., Figures 3 and 4 and the specification as originally filed beginning on page 16, line 4, among others. The Examiner argues claims 8, 10, and 11 are indefinite for failing to clearly indicate where the circuit cards 50, 70, 72 and 74 are connected to store and retrieve internal state information within the resource internal state memory recited in independent claim 1. The interface 68, however, includes a host memory 90 connect to the circuit cards 50, 70, 72, and 74 via busses 78 and 82, where the circuit cards 50, 70, 72, and 74 store and retrieve internal state information within the host memory 90. See the specification beginning at page 16, line 4,

among others. The Applicant requests that in view of the above-recited reference to the specification that the rejection of claims 8, 10, and 11 be withdrawn.

Claim Rejections – 35 U.S.C. § 103

The Examiner rejects claims 1-2, 4-7, 14-21 and 25-35 under 35 U.S.C. § 103(a) as being unpatentable over Bellenger et al. in view of Biba et al. and Sinibaldi et al. Claims 22-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bellenger et al. in view of Biba et al., Sinibaldi et al. and Osler et al. The Examiner rejects claims 3 and 8-11 under 35 U.S.C. § 103(a) as being unpatentable over Bellenger et al. in view of Biba et al. and Sinibaldi et al. as applied to claim 1 above, and further in view of Green et al. The Applicant respectfully traverses the Examiner's rejections.

Claim 1 recites *a data-handling resource controller that responds to one or more conditions ...due to failure or removal of said first data-handling resource, by directing said data from said first data connection to said second data-handling resource without loss of said first data connection.* Claims 14, 19, 22, and 28 recite similar limitations.

The Examiner alleges Bellenger's local control 404 discloses the recited data-handling resource controller, and Bellenger's primary DSP 414 and backup DSP 424 disclose the recited first and second data-handling resources, respectively. Local control 404, however, transfers control over idle sessions from the backup DSP 424 to the primary DSP 414 according to the availability of the primary DSP 414. See, Bellenger, Figures 13A and 13B, specifically blocks 1218A and 1348; col. 36, ll. 53-67. In other words, Bellenger does not teach or suggest transferring control over sessions from the backup DSP 424 to the primary DSP 414 responsive to the removal or failure of the backup DSP 424.

The Examiner appears to argue that a session may become idle due to a defect or failure in the backup DSP 424 controlling the session, and thus require a transfer to the primary DSP 414. Office Action, 6/13/2005, page 7. Nothing in Bellenger, however, teaches or suggests this interpretation. See, e.g., Bellenger, col. 3, ll. 30-53; col. 8, ll. 40-50 (to the contrary Bellenger submits sessions become idle due to PSTN-user inactivity motivated by the fixed pricing policies of ISPs). Bellenger further teaches away from the Examiner's interpretation by requiring the backup DSP 424 to perform multiple tasks in response to an idle condition, such as detecting its own failure (that the session is idle) and actively negotiating a rate reduction in response to the idle session. See, Bellenger, Figures 12A, 12B, 13A, and 13B, specifically blocks 1208B-P, 1210B-P, and 1216A; col. 34, ll. 23-52; col. 36, ll. 40-52. Thus the idle condition triggering Bellenger's session transfer method, under any

reasonable interpretation, cannot be initiated by the failure or removal of the backup DSP 424, as Bellenger requires the failed or removed DSP 424 to perform a portion of the session transfer method.

Even though it is clearly unreasonable for a failed DSP to continue to operate as if it had not failed, the Applicant has amended claim 1 to clearly eliminate the possibility for a failed data-handling resource to continue operating after failure by reciting the *data-handling resource ceases to operate upon failure*. Since Bellenger's DSPs are clearly required to perform multiple tasks in response to an idle session, Bellenger does not anticipate claims 1, 14, 19, 22, 28, and 36, or their corresponding dependent claims. Nothing in Biba, Green, Sinibaldi, or Osler cures this deficiency, as none of the recited references teach or suggest data-handling resource failure, much less responding to the failure with a non-operational data-handling resource.

The Applicant also amends claim 14 to clarify the function of the data-handling resource controller, particularly that the *data-handling resource controller directly monitors the first N of said N+1 data-handling resources to detect the failure or removal*. Claim 28 recites similar limitations. Claim 38 recites the *controller ... detecting a failure of the first data-handling resource*. The Examiner appears to argue the monitoring and detection of an idle session discloses the recited monitoring and detection of the data-handling resource. The Applicant however has amended claims 14 and 28 to clearly eliminate indirect monitoring of the data-handling resources and detection of their failure. In other words, since Bellenger does not teach or suggest directly monitoring the data-handling resources, or detecting their failure, the claims as amended are novel and not obvious. Bellenger further requires DSP 414 or 424 detect their own failure (session idling), not the controller as the claims require. See Bellenger, col. 34, lines 31-33; col. 35, lines 12-13; col. 36, lines 36-41, among others. Bellenger therefore does not anticipate claims 14, 28, and 38, or their corresponding dependent claims.

With regard to claim 22, the Examiner further alleges Osler's idle state discloses the recited *failure or removal of any one of said modem resources*. The idle state, however, is attained by termination or failure of the *link* in a fully operational modem 12, not the failure or removal of the *modem* 12 as the claim requires. Osler, col. 3, lines 15-18. Furthermore Osler's link failure or link termination necessarily terminates the connection, thus requiring complete reconnection from an idle state. Osler, Figure 2; col. 4, lines 8-15; col. 3, lines 21-22. Since Osler does not disclose the *failure or removal of a modem resource*, Osler does not anticipate claim 22 and its corresponding dependent claims.

Claim 28 further recites *periodically saving internal state information from an active data-handling resource in a location separate from said data-handling resource*. The Examiner alleges DSP 414 dynamically updating a control table discloses the periodically saving internal state information. See Office Action, 6/13/2005, page 7; Bellenger, col. 16, lines 40-42. The dynamically updated control table, however, is located within the DSP 414, not a *location separate from said data-handling resource* as the claim requires. See Bellenger, col. 16, lines 34-36; Figure 5. Bellenger's session transfer method discloses DSPs 414 or 424 only saving session parameters after rate negotiations, not periodically as the claims require. Bellenger, Figures 13A-B, particularly block 1346; col. 36, lines 31-33 and 60-64. Since Bellenger does not disclose periodically saving internal state information, Bellenger does not anticipate claim 28, or its corresponding dependent claims. Additionally with regard to claim 32 depending from claim 28, Bellenger fails to teach or suggest varying the periodic saving responsive to the data connection load.

The Applicant has amended claims 25 and 27 to clarify the term data link control information to include *one or more frame transmission records configured with transmission information for frames transmitted by the data-handling resource*. The Applicant agrees with the Examiner that Bellenger does not disclose the recited link control information. Final Office Action, 6/13/2005, Page 8. Biba however does not cure this deficiency, as there is no mention in Biba of maintaining any information corresponding to the transmission of frames, much less frames transmitted by modem 22 within channel bridge 18. Biba therefore does not anticipate claims 25 and 27 or their corresponding dependent claims.

New Claims

The Applicant has added claims 40-52. Claims 40-42 depend from independent claim 19, claim 43 depends from independent claim 25, and claim 44 depends from independent claim 27. Claims 45-52 comprise two new claim sets 45-48 and 49-52. Support for these newly added claims is found in Figure 5 and corresponding sections of the specification as originally filed. Similarly to allowable claim 36, claims 40-52 include subject-matter not taught by the prior art of record, as Bellenger, Biba, and Sinibaldi do not teach or suggest a memory comprising any lists frame acknowledgments or records of frame transmissions.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of claims 1-6, 8-11, and 14-52 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

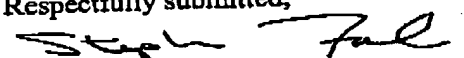
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